

TECHNICAL SHEET

B053	MANNITOL SALT AGAR BASE				
Formula					
Ingredients:			gms/lit.		
Proteose peptone			10.00		
Meat Extract B#			1.00		
Sodium chloride			75.00		
D-Mannitol			10.00		
Phenol red			0.025		
Agar			15.00		
#- Equivalent to Beef extract					
Final pH (at 25°C) : 7.4 ± 0.2					
Directions :					
Suspend 111.02gms in 1000 ml. distilled water. Boil to dissolve the medium completely. Sterilize by autoclaving at 15lbs pressure (121°C) for 15 minutes. If desired, add 5% v/v Egg yolk Emulsion (BF003). Mix well & dispense as desired.					
Principle :					
Mannitol Salt Agar contains Proteose Peptone and Meat Extract B as sources of carbon, nitrogen, vitamins and minerals. D-Mannitol is the carbohydrate source. Sodium Chloride, in high concentration, inhibits most bacteria other than staphylococci. Phenol Red is the pH indicator. Agar is the solidifying agent.					
Bacteria that grow in the presence of a high salt concentration and ferment mannitol produce acid products which turn the phenol red pH indicator from red to yellow. Typical pathogenic staphylococci (coagulase – positive staphylococci) ferment mannitol and form yellow colonies with yellow zones around the colonies. Typical non – pathogenic staphylococci do not ferment mannitol and form red colonies.					
QC Tests – (I)Dehydrated Medium					
			Colour :		
			Light yellow to pink		
			Appearance :		
			Homogeneous Free Flowing powder		
(II)Rehydrated medium					
			pH (post autoclaving/heating) :		
			7.4 ± 0.2		
			Colour (post autoclaving/heating) :		
			Orangish red to red		
			Clarity (post autoclaving/heating) :		
			Clear to slightly opalescent		
(III) Q.C. Test Microbiological					
Cultural characteristics observed after 18 - 72 hours at 35 - 37°C.					
		MICROORGANISM (ATCC)		GROWTH	COLOUR OF COLONY
		Staphylococcus aureus (25923)		Luxuriant	Yellow/white colonies surrounded by yellow zone
		Staphylococcus aureus (6538)		Luxuriant	Yellow/white colonies surrounded by yellow zone
		Staphylococcus epidermidis (14490)		Fair to good	Red
		Staphylococcus epidermidis (12228)		Fair to good	Red
		Escherichia coli (25922)		Inhibited	---
		Escherichia coli (8739)		Inhibited	---
		Proteus mirabilis (12453)		None-poor	Yellow
		Klebsiella aerogenes(13048)		Inhibited	--
Precautions :		1. For Laboratory Use.			
		2. Follow proper, established laboratory procedures in handling and disposing of infectious materials.			
Limitations :		1. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.			
Use :		For selective isolation of pathogenic Staphylococci.			
Storage :		Dehydrated medium- below 30°C Prepared medium- Between 2 to 8°C.			
Packing :		500 gm. bottle			
Product profile:		Reconstitution	Quantity on Preparation (500g)	pH (25°C)	Supplement
					Sterilization
B053		111.02g/l	4.50L	7.4 ± 0.2	5% v/v Egg yolk Emulsion (BF003) if desired
					121 ⁰ C / 15 minutes

Refer disclaimer Overleaf

Disclaimer:

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related BIOMARKLABORATORIES publications.

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